

INFO

WETLAND

CREHO

JULY 2015





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EDITORIAL

To all our readers, welcome to our new version of INFOWETLAND, July 2015. We have worked to renew its format, which we present to you with enthusiasm, hoping it captures your interest and facilitates your reading.

In this issue we present the new initiatives and projects in which the Center has been working, based on the theme areas of greatest interest and the application of methodologies, including biological and socio-environmental assessments; all these experiences provide tools and lessons learned, which can be replicable in the region. It also includes the regional environmental strategy of the Central American Commission on Environment and Development in which the Center is looking to get involved, playing a decisive role in the consolidation of actions to preserve our wetlands in this region.

In this volume, CREHO makes public its interest and reiterates the commitment submitted to the region, the countries and organizations from all over the world that participated in the 12th meeting of the Contracting Parties, held in June 2015 in Uruguay, in reference to its Triennial Strategic Plan, as an initiative that raises for the 29 countries that comprise it, new opportunities to grow and establish ourselves as a strong region, promoting and supporting the conservation and wise use of our wetlands, with full participation of human populations, contributing to strengthening their capabilities.

In this issue, INFOWETLAND updates us on the proactive approach that takes our Center in developing the Capacity Building Program, with the implementation of new international courses, which use innovative tools that promote adaptation and assessment of the effects caused by climate change.

Finally, INFOWETLAND offers a space to promote the publication of works and the initiatives developed by you, urging you to take this opportunity to disseminate and share them, in order to encourage the participation of new players that have a significant activity in management and wise use of our wetlands in the Americas.

REGIONAL ENVIRONMENTAL STRATEGY

2015 - 2020

CENTRAL AMERICA

An important event took place in Antigua, Guatemala, the official the presentation of the Regional Environmental Strategic Framework 2015-2020 (ERAM) by the Central American Commission on Environment and Development (CCAD). It was revealed what would be the purpose of it: "to promote the environmental integration in the region for economic and social development of their peoples, coordinating efforts and activating resources available".

It also became clear that the Strategy sets out the priorities that will be promoted in the coming years: climate change and risk management, forests, oceans and biodiversity, integrated management of water resources, environmental quality, trade and environment, funding mechanism.

We were able to see that it will be focused on the efforts of other subsystems of SICA and the national efforts to facilitate in each country, the necessary actions to ensure environmental sustainability of ecosystems of the region. For all these reasons, one of the most important events that has recently happened in the region.

The Central American Commission on Environment and Development (CCAD), recognizes the need to develop a Regional Environmental Strategic Framework that answers to the current challenges in the region and addresses emerging issues of sustainability from the current framework of systemic crisis, promoting an environmentally friendly economy, aimed at eradicating poverty and social inequalities, promoting sustained, inclusive and equitable growth that complies with the guidelines issued by the Declaration of Punta Cana dated June 27, 2014 as a result of XLIII Meeting of Heads of State and Government of the member countries of the Central American Integration System who agreed to "support and accompany the process of development, validation and implementation of the Regional Environmental Strategy 2015-2020 driven by CCAD, promoting with it the synergistic action of the Multilateral and Regional Environmental Agreements of which our countries are signatories, to contribute to sustainable development and to the integration process in the region".

This approach takes the concept of sustainable development adopted in 1994 by the Central American Alliance for Sustainable Development (ALIDES): "Sustainable development is a process of progressive change in the quality of human life, which places it as the center and primordial subject of development through economic growth with social equity and the transformation of production methods and consumption patterns and is based on the ecological balance and vital support of the region. This process implies respect for ethnic and cultural diversity at the regional, national and local levels, as well as the strengthening and full citizen participation in peaceful coexistence and in harmony with nature, without compromising and Guatemala.

Subsequently, Engineer Christa Castro Varela, Executive Secretary of CCAD, presented the Regional Environmental Strategic Framework 2015-2020, highlighting that the focus of the Regional Strategy integrates efforts of other subsystems of SICA and the national efforts in order to facilitate and promote in each of the countries, according to their social, environmental, institutional and economic particularities, the necessary actions to ensure environmental sustainability of the regional ecosystems.

The main strategic lines that constitute the priorities that will be promoted in the coming years are:

Climate Change and Risk Management

Environmental Quality

Forests, Oceans and Biodiversity

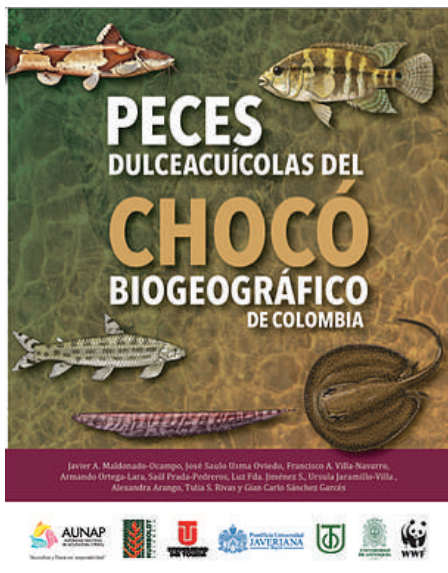
Trade and Environment

Integral Management of Water Resources



Freshwater fishes OF CHOCÓ

Biogeographical Chocó



After a decade increasing the knowledge about freshwater fish, Colombia has embodied its studies in a magnificent book, acknowledging the “Biogeographical Chocó” or “Choco-Darien Eco-regional Complex” as one of the last ichthyologic frontiers to know.

From a practical, clear and very visual way, the book takes us into current issues for the conservation and sustainable use of resources, a topic that helps the environmental and fisheries authorities. The book also presents, accurately, the great variety of species that live in the area and how these species are the major protein intake for the indigenous communities that live there.

As noted by the book, one of the peculiarities of Biogeographical Chocó is its high humidity and rainfall, which makes it the most humid region in the world and the location with the highest average rainfall in the globe. But despite this great biotic and hydrological richness of the Chocó, the region faces serious anthropogenic threats over its natural resources due to the mining

industry, farming and the increase of crops. However, it still possesses a majestic rainy rainforest, unique dry enclaves and a huge wealth of water resources, besides being a strategic enclave connecting South and Central America, one of the most interesting regions for the study of freshwater fish on the planet.

Certainly a highly recommended publication that takes us into the great variety of species in a magical setting of great ecological importance. We hope that initiatives like this will continue and expect to see the publication of works that will help us preserve our wetlands and its animal wealth.

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Socio-Environmental Diagnostic MATUSAGARATÍ

There is no doubt that Matusagaratí Lagoon (Laguna de Matusagaratí) has evoked images of mystery, danger and extraordinary natural beauty through centuries. It has been considered as the continental wetland of greatest extent in the Republic of Panama, its difficult access and increasing deterioration has limited existing knowledge of its natural values; consequently, it has interfered with the planning of effective conservation actions. Therefore a diagnosis by CREO in conjunction with the Ministry of Environment of Panama, the Center for Studies and Social Action (CEASPA) and the Alliance for Conservation and Development (ACD) is performed to assess the situation of such magnificent wetland.

Among the results of these studies, it was concluded that the alternative to protect wetlands, maintaining the integrity of the same, is viable, taking into account the existing conditions and the experiences obtained to date. In this line, CREHO presents to the consideration of decision makers, four alternative proposals to protect wetland areas. Due to the characteristics and species found, for the diversity and presence of unique shared resources in the region, these wetlands could be considered for an appointment to become wetlands of international importance (Ramsar Site) in line with the proposal that has been made by the National Committee of Wetlands.

The biological assessments of the components of the integrated wetland ecosystems for a conservation proposal of the Matusagaratí Wetlands System, Tuirá, Balsas and Chepigana, represent a diversity of habitats and species with high biodiversity, and the need for additional studies focused on specific taxa and fieldwork conducted in different seasons, in order to make more comprehensive sampling, by representing unique processes that could be related to a high level of endemism and unique biological communities, which is a characteristic of many natural areas in the Neotropics.

This analysis indicates that although there are different types of ecosystems in the area, all processes may have interconnectivity among them, as well as with the species that inhabit these and other surrounding areas.

The social and environmental problems in this region are evident, especially in the implementation of activities with unsustainable farming methods that are threatening the integrity of the ecological character of the Laguna Matusagaratí, as well as the processes that occur in surrounding wetlands.

With the establishment of an appropriate institutional framework to ensure the participation of different actors in support and monitoring of governance can be achieved an effective conservation of the wetland systems of Matusagaratí, Tuirá, rafts and Chepigana for present and future generations.



RAPID ASSESSMENT OF MANGROVES AND ASSOCIATED ECOSYSTEMS IN THE GULF OF CHIRIQUI

CREHO developed the rapid assessment of mangroves and ecosystems associated to the Gulf of Chiriquí to establish the condition of conservation and functionality of mangroves and associated ecosystems in the districts of San Lorenzo, San Felix and Remedios in the province of Chiriqui, Republic of Panama.

This research was conducted in collaboration with Wetlands International Foundation, in the framework of the project entitled "Protection of Carbon Sinks and Reservoirs in Mangroves and Protected Areas of Panama", with funding from the German Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMUB), through the International Climate Initiative (ICI).

Activities included: recognition of the 6 areas of study, characterization flora, characterization of fauna, water sampling, and salinity measurement on water wells. Besides from field data collected, also documented the work done with photos and videos, both aerial and land, thereby achieving a valuable material for the study of the region.

With regards to the scope of the investigation, we can mention the characterization of biodiversity of species in mangroves under study, determination of the functions and services provided by areas of study from an ecosystem approach, geographical demarcation of the area of study and location of access routes in order to be able to make long-term assessments, identification of the main types of anthropogenic involvement, and determination of the relationship of these with the fishing communities, timber harvesting, tourism or other activity by a rapid assessment, determination of the physical-chemical quality of water and its possible interaction with anthropogenic effects of surrounding communities, and the development of a comparative model among the sites studied with basic indicators on the state of health of the ecosystem, taking as reference the biodiversity indicators for a long-term monitoring.

Despite the fact that generally all areas of study have a good state of preservation, judging by the large areas of land they cover and the structural developments they reach, when the study of these mangroves deepens, it is evident which factors are influencing on the deterioration of these coastal wetlands and how strongly they are doing it. The damages to these ecosystems jeopardize the correct and complete provision of environmental services provided by mangroves and, although some of them are isolated, with a medium intensity, and precise, they have an impact to decrease the quality of life of the inhabitants of nearby communities and of the people who make a direct use of its resources.

It was found the presence of 58 species of bony fish and four cartilaginous, 15 species of birds, 12 mammals, 6 reptiles and no amphibians. This low level of diversity and abundance is attributed to the time of the year when the rapid ecological assessment was conducted, as well as the short time dedicated to the

characterization of fauna.

Regarding the characterization of flora, it was observed the existence of 7 mangrove species representing 65% of the species registered for Panama, in the Caribbean and the Pacific, and 4 species of plants associated with them. The monitoring carried out in 12 plots established in the 6 areas of mangrove resulted, in general, a good structural composition of mangrove forest.

The quality of water was assessed in 5 of the 6 areas of study, obtaining values within the standard for all parameters analyzed, except for fecal coliforms. This indicates that the resource is being affected by uncontrolled discharge of sewage of human origin and the extensive farming activities carried out in the area. This poses a risk to human health as well as a source of stomach and skin ailments, among others, due to the contamination of water and food.

Of all anthropogenic effects identified during this EER, cutting mangrove trees to obtain its bark, especially in the San Juan Mangrove, is one of the practices that are most affecting this ecosystem, as it was found during the field inspections that there are many *Rhizophora harrisonii* mangrove trees (mangle caballero) cut down per week. The problem of logging is not confined to the removal of most mature specimens with larger size of the mangrove, but excessive contribution of tannins from the bark, which has not been withdrawn, it also produces the mortality of fish larvae and juvenile fishes, crustaceans and mollusks, affecting aquatic food chains and ecosystem balance of marine biodiversity in the estuaries.

It is also important to note that the use of the latest technology to obtain aerial photos and video in real time with a drone, greatly facilitated the location of affected areas and their extension in the context of each of the mangrove areas. This tool is highlighting in conservation works as very useful, given the simplicity of its operation and the large amount of data it provides in a very short time.



RAMSAR COP 12



Under the theme “Wetlands for our future”, on June 1 – 9, 2015 was held the 12th Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands (COP12), at the Conrad Hotel in Punta del Este, Uruguay.

The member states met to evaluate the progress of the Convention and the sustainable use that has been made from wetlands so far. It was also a conference that intended to share knowledge and experience on technical issues, and where each Contracting Party planned what would be its own work and the work of the Secretariat for the next three years. Parallel to the COP 12, the CREHO Center also attended to several events and actively participated on the following:

Network of Wetland Centers LAC (REDLAC). With a successful result, this relevant event ended on June 3, 2015 for everything that happened in Punta del Este, Uruguay. Lines of work and cooperation were defined between local communities and organizations with a common concern: to maintain direct and future connection for wetlands. For this purpose, there were workshops attended by representatives from governments, public and private organizations and members of civil society, with the intention to get a joint collaboration for the functioning of the network and to obtain future successes. Key contributions were given by the speakers: Rosabel Miro (Audubon Panama), Carolina Vera (CEH Chile), Rebeca Magaña (CREHO Regional Center) Patricio Guerrero (ADEMA Chile), Grisely Alvarado (INECODEM Peru), Nahuel Schenone and Ana Julia Gomez (FBNA Argentina).

The side event of CCAD with the concept: “Success stories of sustainable community alternatives in wetlands of the region of the Central American Integration System”. On this occasion discussed issues such as: Supporting RAMSAR Site Management 2016: Punta de Managuibe Wildlife Refuge, Gulf of Fonseca, Nicaragua, Honduras, El Salvador and Panama Bay Wetland. The speakers and moderators were: Christa Castro, Executive Secretary of Central American Commission on Environment and Development (CCAD); Vanessa Davila, National Council of Protected Areas (CONAP) of the Republic of Guatemala; Masaki Osawa, Senior Advisor for the Promotion Project for Participatory Management in Biodiversity Conservation (MAPCOBIO), Japan International Cooperation Agency (JICA); Augusto Flores, Vice Minister of Ministry of Environment and Natural Resources of the Republic of Nicaragua; Daisy Samayoa, Secretary of Energy, Natural Resources, Environment and Mining of the Republic of Honduras; Enrique Barraza – Ministry of Environment and Natural Resources of the Republic of El Salvador; Zuleika Pinzón, Ministry of Environment of the Republic of Panama and Arturo Dominici Arosemena, Executive Director of RAMSAR Regional Center for the Western Hemisphere (CREHO).

Event of Ramsar Centers. The RAMSAR Centers of East Africa, RAMSAR Regional Center (CREHO) and East Asia Regional Center convened this important event under the slogan “RAMSAR Regional Centers; synergies and lessons learned”, held on June 6 in Punta del Este, Uruguay, in the Barriloché Room at the Conrad Hotel. Among the topics discussed were: achievements to date, challenges and key lessons, CREHO strategic framework, milestones for the next triennium by D. Arturo Dominici (CREHO) and D. Paul Mafabi (RAMCEA), and problems and difficulties, possible solutions and future direction by D. Suh Seung Oh.

CREHO fue moderador, el 8 de junio, en otro evento paralelo del proyecto para la promoción de Manejo CREHO



moderated another parallel event of the project for the promotion of Participatory Management in Biodiversity Conservation (MAPCOBIO) and the Japan International Cooperation Agency (JICA) with the theme of Sustainable Production in Wetlands of the Central American region. The following lectures were presented: “Successful experience of sustainable production in a wetland of international importance: Isla Cozumel (Mexico), Lake Enriquillo (Dominican Rep.), Palo Verde (Costa Rica), and the presentation of keywords identified”, among others. Interesting presentations were conducted by experts and personalities such as: Doctor Luis Rojas Bolaños, Doctor Laura Martinez Pepin, Biologist Juana Evangelista Peña, and Doctor Julio Jurado Fernandez, who described successful experiences of sustainable production in a wetland of international importance in different countries. Also attended other presentations like the presentation given by Masaki Osawa, who identified keywords or the discussion forum: How can the Meso-American countries and the Caribbean cooperate to promote the use of the Region? It was moderated by Dr. Arturo Dominici Arosemena, Director of CREHO.

CREHO also participated together with representatives of other Ramsar Regional Centers, in the side event on “Wetland Symposia” held in East Asia, organized by Wetlands International of Japan, WI China, the government of Japan and the Ramsar Regional Center for East Asia (RRC-EA). Positioning between the plans of the organization, the potential coordination of a congress of Wetlands for the Americas, the ideas discussed in this event and the contacts established will help on this task.

TRIENNIAL PLAN 2015-2017



With the publication of this plan for three years, from CREHO is intended to achieve such ambitious goals as to improve and strengthen the implementation of the guidelines of the Ramsar Convention, offering technical contributions.

One of the priority strategic lines is the strengthening of actors and management bodies; for example: the National Wetland Committees in the Region; channeling efforts and needs through the national focal points to the Convention, and a greater involvement of the focal points for the scientific technical review group (STRP) because they contribute to the implementation of the Convention, promoting the exchange of information and experiences regarding knowledge, management and rehabilitation of wetlands. This is done through the exchange of programs and projects with particular themes, according to the geographic region and their particular needs, as part of their role as advisory entities.

With all this, from CREHO it is intended that in the next three years the center is better known, internationally, by the actions it conducts with the management and rational use of wetlands in the Western Hemisphere. To do this, the capacity of regional key actors will be strengthened with the intention of reaching countries where we still have to broaden our range of action such as the Greater Caribbean, one of the most vulnerable regions, breaking the language barrier and working on the same line to prepare for the consequences of natural and man-made hazards in the region.

The general objective to be achieved for this triennium will be: to develop new alliances with strategic partners and decision makers in the region by multiplying the efforts conducted by CREHO to benefit the conservation of wetlands. All this through training and promotion of research.

With a budget of \$786,500.00 for the full three years, it is intended to achieve specific objectives such as:

Strengthen the Center as a regional initiative, which contributes to the implementation of the technical guidelines of the Ramsar Convention through capacity building between the countries of Western Hemisphere.

Strengthen the mechanisms required for the exchange of information and experiences that raise the conscience of the population on the role of wetlands in the Western Hemisphere.

Contribute to the efficient management and implementation of financial resources that contribute to good management and wise use of wetlands at the regional level, through the development of strengths and opportunities offered by the Center.

Therefore, CREHO is presented as an option that enjoys the support of governments to apply through its expertise, well-defined methodologies of work, with highly qualified personnel. The work scheme allows strengthening programs to exceed the scope of training and to design developments of commitments for solutions from the regional experiences, thereby achieving high efficiency in its programs.

COURSES

INTERNATIONAL COURSE ON ADAPTATION BASED ON MARINE-COASTAL ECOSYSTEMS

From June 15 to July 17, 2015, CREHO launched its International Course: Ecosystem-Based Adaptation in Marine-Coastal Areas. The course includes the participation of professionals from countries like Peru, Ecuador and Puerto Rico, representing organizations such as KFW-German Financial Cooperation, Fundacion Madre Tierra Atabey, International Conservation and the Ministry of Environment, among others. It was aimed for professionals and specialists of the industry, related to wetlands topics, both in the governmental and non-governmental sector, public and private companies. The objective is to provide necessary information to support the management of coastal and marine ecosystems that can help face climate change and reduce the risk of disasters. A part time attendance and for four weeks will address topics such as: adaptation to climate change in marine – coastal areas, or how to address climate change in the Pacific Coast of Panama and in Latin America.



NEXT INTERNATIONAL COURSE ON ENVIRONMENTAL IMPACT ASSESSMENT AND STRATEGIC ENVIRONMENTAL ASSESSMENT, WITH THE APPROACH TO CLIMATE CHANGE.

CREHO is organizing, together with Fundacion Wetlands International and the Latin American Center for Competitiveness and Sustainable Development (CLACDS) of INCAE, the International Course on Environmental Impact Assessment and Strategic Environmental Assessment, with a focus on climate change. The purpose of this course is to provide professionals in the region, who are related with the management of wetlands or environmental impact activities, with the technical and methodological guidelines of the Ramsar Convention and other elements for assessing the impact on wetlands, with emphasis on adaptation measures based on coastal-marine ecosystems.

This course has been designed for decision makers and mid-level officials, either from the government, private, non-governmental and international organizations, at the professional and technical levels, who work in activities or functions related to wetlands. It has been divided into two phases: The virtual stage, distance course, which will be held from September 28 to October 23, 2015, and the on-site stage in a hotel located in Panama City, which will be held on October 26 – 30, 2015.



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